Source of the Data and Accuracy of the Estimates for the April 2004 CPS Microdata File on Child Support

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SOURCE OF DATA

The data in this microdata file are from the April 2004 Current Population Survey (CPS). The Census Bureau conducts the CPS every month, although this file has only April data. The April survey uses two sets of questions, the basic CPS and a set of supplemental questions. The CPS, sponsored jointly by the Census Bureau and the U.S. Bureau of Labor Statistics, is the country's primary source of labor force statistics for the entire population. The Department of Health and Human Services and the Census Bureau jointly sponsor the supplemental questions for April.

Basic CPS. The monthly CPS collects primarily labor force data about the civilian noninstitutional population living in the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized people in Census 2000). Interviewers ask questions concerning labor force participation about each member 15 years old and over in sample households. Typically, the week containing the 19th of the month is the interview week. The week containing the 12th is the reference week (i.e., the week about which the labor force questions are asked).

The CPS uses a multistage probability sample based on the results of the decennial census, with coverage in all 50 states and the District of Columbia. When files from the most recent decennial census become available, the Census Bureau gradually introduces a new sample design for the CPS[1].

In April 2004, the Census Bureau began phasing out the 1990 sample and replacing it with the 2000 sample, creating a mixed sampling frame. Two simultaneous changes occurred during this phase-in period. First, primary sampling units (PSUs)[2] selected for only the 2000 design gradually replaced those selected for the 1990 design. This involved 10 percent of the sample. Second, within PSUs selected for both the 1990 and 2000 designs, sample households from the 2000 design gradually replaced sample households from the 1990 design. This involved about 90 percent of the sample. The new sample design was completely implemented by July 2005. Under the new sample design, the entire sample comes from Census 2000 files.

In the first stage of the sampling process, PSUs are selected for sample. The United States is divided into 2,025 PSUs. The PSUs were redefined for this design to correspond to the Office of Management and Budget definitions of Core-Based Statistical Area definitions and to improve efficiency in field operations. These PSUs are grouped into 824 strata. Within each stratum, a single PSU is chosen for the sample, with its probability of selection proportional to its population as of the most recent decennial census. This PSU represents the entire stratum from

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[1] For detailed information on the 1990 sample redesign, please see reference [1].

[2] The PSUs correspond to substate areas, counties or groups of counties that are geographically contiguous.

which it was selected. In the case of strata consisting of only one PSU, the PSU is chosen with certainty.

Approximately 72,000 housing units were selected for sample from the mixed sampling frame in April. Based on eligibility criteria, 11 percent of these housing units were sent directly to Computer-Assisted Telephone Interviewing (CATI). The remaining units were assigned to interviewers for Computer-Assisted Personal Interviewing (CAPI).[3] Of all housing units in sample, about 60,000 were determined to be eligible for interview. Interviewers obtained interviews at about 55,000 of these units. Noninterviews occur when the occupants are not found at home after repeated calls or are unavailable for some other reason.

April 2004 Supplement. In April 2004, in addition to the basic CPS questions, interviewers asked supplementary questions about the economic situation of persons and families for the previous year. All household members 15 years of age and older that are a biological parent of children in the household from an absent parent were asked detailed questions about child support and alimony.

April supplement data are matched to March supplement data for households that were in sample in both March and April 2004. In March 2004, there were 4,816 household members eligible of which 1,463 required imputation of child support data. When matching the March 2004 and April 2004 data sets, there were 146 eligible people on the March file that did not match to people on the April file. Child support data for these 146 people were imputed. The remaining 1,317 imputed cases were due to nonresponse to the child support questions. Table 1 gives the sample sizes and the imputation rates by marital status.

Table 1. Sample Sizes and Imputation Rates: April 2004			
Marital Status	**Sample Size**	**Imputed Cases**	**Rate**
Married	1,116	299	27%
Widowed	72	26	36%
Divorced	1,819	542	30%
Separated	512	170	33%
Never Married	1,297	426	33%
Total	4,816	1,463	30%

Estimation Procedure. This survey's estimation procedure adjusts weighted sample results to agree with independently derived population estimates of the civilian noninstitutional population of the United States and each state (including the District of Columbia). These population estimates, used as controls for the CPS, are prepared monthly to agree with the most current set of population estimates that are released as part of the Census Bureau's population estimates and projections program.

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[3] For further information on CATI and CAPI and the eligibility criteria, please see reference [2].

The population controls for the nation are distributed by demographic characteristics in two ways:
- • Age, sex, and race (White alone, Black alone, and all other groups combined), and
- • Age, sex, and Hispanic origin.

The population controls for the states are distributed by race (Black alone and all other race groups combined), age (0-15, 16-44, and 45 and over), and sex.

The independent estimates by age, sex, race, and Hispanic origin and for states by selected age groups and broad race categories are developed using the basic demographic accounting formula whereby the population from the latest decennial data is updated using data on the components of population change (births, deaths, and net international migration) with net internal migration as an additional component in the state population estimates.

The net international migration component in the population estimates includes a combination of:

- • Legal migration to the United States,
- • Emigration of foreign born and native people from the United States,
- • Net movement between the United States and Puerto Rico,
- • Estimates of temporary migration, and
- • Estimates of net residual foreign-born population, which include unauthorized migration.

Because the latest available information on these components lags the survey date, it is necessary to make short-term projections of these components to develop the estimate for the survey date.

ACCURACY OF THE ESTIMATES
A sample survey estimate has two types of error: sampling and nonsampling. The accuracy of an estimate depends on both types of error. The nature of the sampling error is known given the survey design; the full extent of the nonsampling error is unknown.

Sampling Error. Since the CPS estimates come from a sample, they may differ from figures from an enumeration of the entire population using the same questionnaires, instructions, and enumerators. For a given estimator, the difference between an estimate based on a sample and the estimate that would result if the sample were to include the entire population is known as sampling error. Standard errors, as calculated by methods described in "Standard Errors and Their Use," are primarily measures of the magnitude of sampling error. However, they may include some nonsampling error.

Nonsampling Error. For a given estimator, the difference between the estimate that would result if the sample were to include the entire population and the true population value being estimated is known as nonsampling error. Sources of nonsampling errors include the following:

- • Inability to get information about all sample cases (nonresponse).
- • Definitional difficulties.
- • Differences in the interpretation of questions.
- • Respondent inability or unwillingness to provide correct information.
- • Respondent inability to recall information.
- • Errors made in data collection, such as recording and coding data.
- • Errors made in processing the data.
- • Errors made in estimating values for missing data.
- • Failure to represent all units with the sample (undercoverage).

The Census Bureau employs quality control procedures throughout the production process including the overall design of surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports to minimize these errors.

Two types of nonsampling error that can be examined to a limited extent are nonresponse and undercoverage.

Nonresponse. The effect of nonresponse cannot be measured directly, but one indication of its potential effect is the nonresponse rate. For the April 2004 basic CPS, the nonresponse rate was 7.7 percent. The nonresponse rate for the Child Support supplement was an additional 6.3 percent. These two nonresponse rates lead to a combined supplement nonresponse rate of 13.5 percent.

Coverage. The concept of coverage in the survey sampling process is the extent to which the total population that could be selected for sample "covers" the survey's target population. Missed housing units and missed people within sample households create undercoverage in the CPS. Overall CPS undercoverage for April 2004 is estimated to be about 12 percent. CPS coverage varies with age, sex, and race. Generally, coverage is larger for females than for males and larger for non-Blacks than for Blacks.

The CPS weighting procedure partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, Hispanic ancestry, and state of residence. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources.

A common measure of survey coverage is the coverage ratio, calculated as the estimated population before poststratification divided by the independent population control. Table 1 shows April 2004 CPS coverage ratios by age and sex for certain race and Hispanic groups. The CPS coverage ratios can exhibit some variability from month to month.

Age Group	All People	Totals		White Only		Black Only		Residual Race		Hispanic	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Table 2. CPS Coverage Ratios: April 2004											
0-15	0.90	0.90	0.91	0.92	0.92	0.79	0.79	0.93	1.02	0.93	0.94
16-19	0.85	0.86	0.85	0.88	0.87	0.70	0.69	0.90	0.96	0.96	0.90
20-24	0.77	0.75	0.79	0.77	0.82	0.62	0.74	0.75	0.65	0.74	0.85
25-34	0.83	0.80	0.86	0.82	0.88	0.70	0.80	0.76	0.81	0.76	0.87
35-44	0.88	0.85	0.90	0.87	0.93	0.69	0.76	0.86	0.90	0.83	0.88
45-54	0.92	0.91	0.93	0.92	0.95	0.80	0.84	0.91	0.93	0.81	0.91
55-64	0.93	0.93	0.93	0.93	0.94	0.88	0.90	0.91	0.85	0.86	0.90
65+	0.93	0.94	0.92	0.94	0.92	0.90	1.00	0.96	0.82	0.75	0.85
15+	0.88	0.87	0.89	0.88	0.91	0.74	0.82	0.86	0.85	0.81	0.88
0+	0.88	0.87	0.90	0.89	0.91	0.76	0.81	0.87	0.89	0.84	0.90

Notes: (1) The Residual Race group includes cases indicating a single race other than White or Black, and cases indicating two or more races.

(2) Hispanics may be of any race.

Comparability of Data. Data obtained from the CPS and other sources are not entirely comparable. This results from differences in interviewer training and experience and in differing survey processes. This is an example of nonsampling variability not reflected in the standard errors. Therefore, caution should be used when comparing results from different sources.

Caution should also be used when comparing the data from this microdata file, which reflects Census 2000-based controls, with microdata files from March 1994 through December 2001, which reflect 1990 census-based controls. Caution should also be used when comparing the data from this microdata file to certain microdata files from 2002, namely June, October, and November, which contain both Census 2000-based estimates and 1990 census-based estimates. When comparing estimates, the same controls should be used when possible.

Microdata files from previous years reflect the latest available census-based controls. Although this change in population controls had relatively little impact on summary measures such as averages, medians, and percentage distributions, it did have a significant impact on levels. For example, use of Census 2000-based controls results in about a one percent increase from the 1990 census-based controls in the civilian noninstitutional population and in the number of families and households. Thus, estimates of levels for data collected 2002 and later years will differ from those for earlier years by more than what could be attributed to actual changes in the population. These differences could be disproportionately greater for certain population subgroups than for the total population.

Users should also exercise caution because of changes caused by the phase-in of the Census 2000 files. During this time period, CPS data are collected from sample designs based on different censuses. Three features of the new CPS design have the potential of affecting published estimates: (1) the temporary disruption of the rotation pattern from August 2004 through June 2005 for a comparatively small portion of the sample, (2) the change in sample

areas, and (3) the introduction of the new Core-Based Statistical Areas (formerly called metropolitan areas). Most of the known effect on estimates during and after the sample redesign will be the result of changing from 1990 to 2000 geographic definitions. Research has shown that the national-level estimates of the metropolitan and nonmetropolitan populations should not change appreciably because of the new sample design. However, users should still exercise caution when comparing metropolitan and nonmetropolitan estimates across years with a design change, especially at the state level.

Caution should also be used when comparing Hispanic estimates over time. No independent population control totals for people of Hispanic ancestry were used before 1985.

A Nonsampling Error Warning. Since the full extent of the nonsampling error is unknown, one should be particularly careful when interpreting results based on small differences between estimates. Even a small amount of nonsampling error can cause a borderline difference to appear significant or not, thus distorting a seemingly valid hypothesis test. Caution should also be used when interpreting results based on a relatively small number of cases. Summary measures (such as medians and percentage distributions) probably do not reveal useful information when computed on a subpopulation smaller than 75,000.

For additional information on nonsampling error including the possible impact on CPS data when known, refer to references [2] and [3].

Standard Errors and Their Use. The sample estimate and its standard error enable one to construct a confidence interval. A confidence interval is a range that would include the average result of all possible samples with a known probability. For example, if all possible samples were surveyed under essentially the same general conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then approximately 90 percent of the intervals from 1.645 standard errors below the estimate to 1.645 standard errors above the estimate would include the average result of all possible samples.

A particular confidence interval may or may not contain the average estimate derived from all possible samples. However, one can say with specified confidence that the interval includes the average estimate calculated from all possible samples.

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The most common type of hypothesis is that the population parameters are different. An example of this would be comparing the percentage of men who were part-time workers to the percentage of women who were part-time workers.

Tests may be performed at various levels of significance. A significance level is the probability of concluding that the characteristics are different when, in fact, they are the same. For example, to conclude that two characteristics are different at the 0.10 level of significance, the absolute value of the estimated difference between characteristics must be greater than or equal to 1.645 times the standard error of the difference.

The Census Bureau uses 90-percent confidence intervals and 0.10 levels of significance to determine statistical validity. Consult standard statistical textbooks for alternative criteria.

Estimating Standard Errors. The Census Bureau uses replication methods to estimate the standard errors of CPS estimates. These methods primarily measure the magnitude of sampling error. However, they do measure some effects of nonsampling error as well. They do not measure systematic biases in the data due to nonsampling error. Bias is the average over all possible samples of the differences between the sample estimates and the true value.

Generalized Variance Parameters. While it is possible to compute and present an estimate of the standard error based on the survey data for each estimate in a report, there are a number of reasons why this is not done. A presentation of the individual standard errors would be of limited use, since one could not possibly predict all of the combinations of results that may be of interest to data users. Additionally, variance estimates are based on sample data and have variances of their own. Therefore, some methods of stabilizing these estimates of variance, for example, by generalizing or averaging over time, may be used to improve their reliability.

Experience has shown that certain groups of estimates have similar relationships between their variances and expected values. Modeling or generalizing may provide more stable variance estimates by taking advantage of these similarities. The generalized variance function is a simple model that expresses the variance as a function of the expected value of the survey estimate. The parameters of the generalized variance function are estimated using direct replicate variances. These generalized variance parameters provide a relatively easy method to obtain approximate standard errors for numerous characteristics. In this source and accuracy statement, Table 3 provides the generalized variance parameters for labor force estimates, Table 4 provides the parameters for April supplement data, and Tables 5 through 7 provide factors for use with the parameters.

Standard Errors of Estimated Numbers. The approximate standard error, s_x, of an estimated number from this microdata file can be obtained by using the formula:

$$s_x = \sqrt{ax^2 + bx} \qquad (1)$$

Here x is the size of the estimate and a and b are the parameters in Table 3 or 4 associated with the particular type of characteristic. When calculating standard errors from cross-tabulations involving different characteristics, use the set of parameters for the characteristic that will give the largest standard error.

Illustration 1
Suppose you want to calculate the standard error and a 90-percent confidence interval of the number of unemployed females in the civilian labor force when the number of unemployed females in the civilian labor force is about 3,894,000. Use Formula (1) and the appropriate parameters from Table 3 to get

Illustration 1	
Number of unemployed females in the civilian labor force (x)	3,894,000
a parameter (a)	-0.000033
b parameter (b)	2,693
Standard error	100,000
90% confidence interval	3,730,000 to 4,059,000

The standard error is calculated as

$$s_x = \sqrt{-0.000033 \times 3,894,000^2 + 2,693 \times 3,894,000} = 100,000$$

The 90-percent confidence interval is calculated as $3,894,000 \pm 1.645 \times 100,000$.

A conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 90 percent of all possible samples.

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on both the size of the percentage and its base. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. When the numerator and denominator of the percentage are in different categories, use the parameter from Table 3 or 4 as indicated by the numerator.

The approximate standard error, $s_{x,p}$, of an estimated percentage can be obtained by using the formula:

$$s_{x,p} = \sqrt{\frac{b}{x} p(100-p)} \qquad (2)$$

Here x is the total number of people, families, households, or unrelated individuals in the base of the percentage, p is the percentage ($0 \leq p \leq 100$), and b is the parameter in Table 3 or 4 associated with the characteristic in the numerator of the percentage.

Illustration 2
In 2004, of the 11,587,000 custodial mothers in the United States, 30.5% were never married. Using the appropriate parameter from Table 4 and Formula (2) to get

Illustration 2	
Percentage of never married custodial mothers (p)	30.5
Base (x)	11,587,000
b parameter	6,249
Standard error	1.07
90% confidence interval	28.7 to 32.3

The standard error is calculated as

$$s_{x,p} = \sqrt{\frac{6,249}{11,587,000} \times 30.5 \times (100.0 - 30.5)} = 1.07$$

The 90-percent confidence interval for the estimated percentage of never married custodial mothers is from 28.7 to 32.3 percent (i.e., $30.5 \pm 1.645 \times 1.07$).

Standard Errors of Estimated Differences. The standard error of the difference between two sample estimates is approximately equal to

$$s_{x-y} = \sqrt{s_x{}^2 + s_y{}^2} \qquad\qquad (3)$$

where s_x and s_y are the standard errors of the estimates, x and y. The estimates can be numbers, percentages, ratios, etc. This will result in accurate estimates of the standard error of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. However, if there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

Illustration 3
In 2003, of the 6,516,000 custodial mothers that were due child support, 2,948,000 or 45.2% received the full amount of child support due. Of the 740,000 custodial fathers that were due child support, 342,000 or 46.2% received the full amount of child support due. Use the appropriate parameters from Table 4 and Formulas (2) and (3) to get

Illustration 3			
	Male (x)	Female (y)	Difference
Percentage received full child support (p)	46.2	45.2	1.0
Number	740,000	6,516,000	-
b parameter (b)	2,943	2,943	-
Standard error	3.14	1.06	3.31
90% confidence interval	41.0 to 51.4	43.5 to 46.9	-4.46 to 6.46

The standard error of the difference is calculated as

$$s_{x-y} = \sqrt{3.14^2 + 1.06^2} = 3.31$$

The 90-percent confidence interval around the difference is calculated as $1.0 \pm 1.645 \times 3.31$. Since this interval includes zero, we can conclude with 90 percent confidence that the percentage of custodial mothers due child support who receive the full amount due is not significantly different from the percentage of custodial fathers due child support who received the full amount due.

Accuracy of State Estimates. The redesign of the CPS following the 1980 census provided an opportunity to increase efficiency and accuracy of state data. All strata are now defined within state boundaries. The sample is allocated among the states to produce state and national estimates with the required accuracy while keeping total sample size to a minimum. Improved accuracy of state data was achieved with about the same sample size as in the 1970 design.

Since the CPS is designed to produce both state and national estimates, the proportion of the total population sampled and the sampling rates differ among the states. In general, the smaller the population of the state the larger the sampling proportion. For example, in Vermont approximately 1 in every 400 households is sampled each month. In New York the sample is about 1 in every 2,000 households. Nevertheless, the size of the sample in New York is four times larger than in Vermont because New York has a larger population.

Computation of Standard Errors for State Estimates. The standard error for a state may be obtained by determining new state-level a and b parameters and then using these adjusted parameters in the standard error formulas mentioned previously. To determine a new state-level b parameter (b_{state}), multiply the b parameter from Table 3 or 4 by the state factor from Table 5. To determine a new state-level a parameter (a_{state}), use the following.

(1) If the a parameter from Table 3 or 4 is positive, multiply the a parameter by the state factor from Table 5.

(2) If the a parameter in Table 3 or 4 is negative, calculate the new state-level a parameter as follows:

$$a_{state} = \frac{-b_{state}}{\text{State Control Total}}$$ (12)

The state control total is found in Table 5.

Illustration 4
Suppose you want to calculate the standard error for the percentage of people 18 years old and over living in the state of Florida who had completed a bachelor's degree or more. Suppose about 3,293,000 (25.3 percent) people had completed at least a bachelor's degree when there were about 12,993,000 people aged 18 and over living in Florida. Following the method mentioned above, obtain the needed state parameter by multiplying the parameter in Table 4 by the state factor in Table 5 for the state of interest. In this example, the educational attainment parameter for Total or White in Florida is calculated as $b_{state} = 2,841 \times 1.14 = 3,239$. Use formula (2) with the b_{state} parameter, 3,239, to get

Illustration 4	
Percentage (p)	25.3
Base (x)	12,993,000
b parameter * State Factor $= b_{state}$ parameter	2,841 x 1.14 = 3,239
State factor	1.14
Standard error	0.69

Technical Assistance. If you require assistance or additional information, please contact the Demographic Statistical Methods Division via e-mail at dsmd.source.and.accuracy@census.gov.

Table 3. Parameters for Computation of Standard Errors for Labor Force Characteristics: April 2004		
Characteristic	a	b
Labor Force and Not in Labor Force Data Other than Agricultural Employment and Unemployment		
Total or White	-0.000008	1,586
Men	-0.000035	2,927
Women	-0.000033	2,693
Both sexes, 16 to 19 years	-0.000244	3,005
Black	-0.000154	3,296
Men	-0.000336	3,332
Women	-0.000282	2,944
Both sexes, 16 to 19 years	-0.001531	3,296
Hispanic Ancestry	-0.000187	3,296
Men	-0.000363	3,332
Women	-0.000380	2,944
Both sexes, 16 to 19 years	-0.001822	3,296
Asian and Pacific Islander (API)	-0.000272	2,749
Men	-0.000569	2,749
Women	-0.000521	2,749
Unemployment		
Total or White	-0.000017	3,005
Men	-0.000035	2,927
Women	-0.000033	2,693
Both sexes, 16 to 19 years	-0.000244	3,005
Black	-0.000154	3,296
Men	-0.000336	3,332
Women	-0.000282	2,944
Both sexes, 16 to 19 years	-0.001531	3,296
Hispanic Ancestry	-0.000187	3,296
Men	-0.000363	3,332
Women	-0.000380	2,944
Both sexes, 16 to 19 years	-0.001822	3,296
Asian and Pacific Islander (API)	-0.000272	2,749
Men	-0.000569	2,749
Women	-0.000521	2,749
Agricultural Employment		
Total	0.001345	2,989

Notes: (1)   *These parameters are to be applied to basic CPS monthly labor force estimates.*

           (2)   *For foreign-born and noncitizen characteristics for Total and White, the a and b parameters should be multiplied by 1.3. No adjustment is necessary for foreign-born and noncitizen characteristics for Blacks, APIs, and Hispanics.*

Table 4. Parameters for Computation of Standard Errors for Child Support Characteristics: April 2004								
Characteristics	Total or White		Black		API, AIAN, NH & OPI		Hispanic	
	a	b	a	b	a	b	a	b
INCOME								
Persons	-0.000012	2,943	-0.000073	3,370	-0.000205	3,370	-0.000176	5,679
Families	-0.000011	2,687	-0.000063	2,935	-0.000178	2,935	-0.000153	4,946
POVERTY								
Persons Below the Poverty Level	-0.000043	12,448	-0.000223	12,448	-0.000630	12,448	-0.000519	20,978
NONINCOME								
Women/Men with Dependent Children Whose Father/Mothers are Absent Marital Status	-0.000022	6,249	-0.000161	8,977	-0.000454	8,977	-0.000374	15,129
SELECTED CHARACTERISTICS OF MEN AND WOMEN								
Education	-0.000011	2,841	-0.000069	3,214	-0.000195	3,214	-0.000113	3,660

Notes:

(1) *API, AIAN, NH, and OPI are Asian and Pacific Islander, American Indian and Alaska Native, Native Hawaiian, and Other Pacific Islander, respectively.*

(2) *Hispanics may be of any race.*

(3) *The Total or White, Black, and API parameters are to be used for both "alone" and "in combination" race group estimates.*

(4) *For nonmetropolitan characteristics, multiply a and b parameters by 1.5. If the characteristic of interest in total state population, no subtotaled by race or ancestry, the a and b parameters are zero.*

(5) *For foreign-born and noncitizen characteristics for Total and White, the a and b parameters should be multiplied by 1.3. No adjustment is necessary for foreign-born and noncitizen characteristics for Blacks, APIs, and Hispanics.*

Table 5. Factors for State Standard Errors and Parameters and State Populations: April 2004					
State	Factor	Population	State	Factor	Population
Alabama	0.94	4,434,545	Montana	0.23	907,882
Alaska	0.12	633,357	Nebraska	0.34	1,714,243
Arizona	1.15	5,605,560	Nevada	0.35	2,268,871
Arkansas	0.64	2,688,232	New Hampshire	0.22	1,282,706
California	1.49	35,293,568	New Jersey	0.92	8,562,807
Colorado	0.67	4,504,521	New Mexico	0.46	1,862,860
Connecticut	0.55	3,437,920	New York	1.00	18,938,695
Delaware	0.18	810,546	North Carolina	1.09	8,266,422
District of Columbia	0.14	547,750	North Dakota	0.13	617,643
Florida	1.14	16,937,013	Ohio	1.13	11,274,041
Georgia	1.70	8,583,742	Oklahoma	0.72	3,446,082
Hawaii	0.26	1,234,913	Oregon	0.68	3,553,299
Idaho	0.30	1,360,716	Pennsylvania	1.04	12,165,709
Illinois	1.08	12,503,685	Rhode Island	0.16	1,065,699
Indiana	0.92	6,130,241	South Carolina	0.83	4,078,644
Iowa	0.51	2,899,643	South Dakota	0.13	749,651
Kansas	0.48	2,671,624	Tennessee	1.35	5,774,079
Kentucky	0.83	4,054,321	Texas	1.37	21,905,363
Louisiana	1.05	4,397,196	Utah	0.46	2,351,249
Maine	0.21	1,296,194	Vermont	0.11	615,222
Maryland	0.93	5,445,133	Virginia	1.32	7,203,052
Massachusetts	0.93	6,352,028	Washington	1.11	6,074,195
Michigan	1.05	9,975,077	West Virginia	0.34	1,788,546
Minnesota	0.81	5,020,218	Wisconsin	0.82	5,415,608
Mississippi	0.73	2,819,233	Wyoming	0.10	493,692
Missouri	1.00	5,617,383			

Notes: These factors are for use with state level estimates for subpopulation groups.

Table 6. Factors for Census Division Child Support Characteristics: April 2004		
Division	Factor	Population
New England	0.61	14,049,769
Middle Atlantic	1.00	39,667,211
East North Central	1.03	45,298,652
West North Central	0.68	19,290,405
South Atlantic	1.14	53,660,848
East South Central	1.01	17,082,178
West South Central	1.19	32,436,873
Mountain	0.66	19,355,351
Pacific	1.33	46,789,332

Notes: These factors are for use with census division level estimates for subpopulation groups.

Table 7. Factors for Census Region Child Support Characteristics: April 2004		
Region	Factor	Population
Midwest	0.93	53,716,980
Northeast	0.90	64,589,057
South	1.14	103,179,899
West	1.14	66,144,683
All Except South	1.00	184,450,720

Notes: These factors are for use with region level estimates for subpopulation groups.

References

[1]   Bureau of Labor Statistics (1994), Employment and Earnings, Volume 41 Number 5, May 1994, U.S. Department of Labor, Washington, DC.

[2]   U.S. Census Bureau (2002), Current Population Survey: Design and Methodology, Technical Paper 63RV, U.S. Department of Commerce, Washington, DC. (http://www.census.gov/prod/2002pubs/tp63rv.pdf)

[3]   Brooks, C.A. and Bailar, B.A. (1978), Statistical Policy Working Paper 3 - An Error Profile: Employment as Measured by the Current Population Survey, Subcommittee on Nonsampling Errors, Federal Committee on Statistical Methodology, U.S. Department of Commerce, Washington, DC. (http://www.fcsm.gov/working-papers/spp.html)